

undiscovered opportunities  
insurance | analytics



Advanced analytics  
for insurance

 **ERNST & YOUNG**  
Quality In Everything We Do

[www.mvrhealthokay.com](http://www.mvrhealthokay.com)

unlock value

profitable growth

deep experience


innovation

insight

whole brain analytics

..... We work with insurers to find opportunities that deliver profitable growth while protecting and optimising their enterprise.

Drawing on our deep insurance experience and ..... a new, whole brain analytics approach, we'll help you unlock new areas of value.



Natural perils, globalisation, and disruption in distribution combined with regulatory intervention and increased competition has put immense pressure on insurers.

Rapid integration of technology and life has created a proliferation of data, presenting unprecedented opportunities to use advanced analytics to leverage new information - about potential markets, risks, customers, competitors and natural disasters.

Infusing advanced analytics capability into an insurer's DNA allows you to identify new growth opportunities while at the same time protecting and optimising your enterprise.

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# Trends, implications and opportunities

The proliferation of data, technology advances  
and innovation in analytics create opportunities to  
take advantage in a changing world

## trends

**natural disaster volatility**  
opaque view on risk and concentration

**intensifying global regulation**  
stakeholders demand more information in real time

**decreasing face to face interaction**  
yet customers demand a more personal experience

**data proliferation**  
accessing and synthesising massive data volumes  
requires a new approach

▶ opportunities

sensors across the planet capture data to create early warning systems


real time analytics automates compliance reporting to meet stakeholder needs

leverage human digital records to tailor services to a customer's situation, behaviours, preferences and risk profile

use advanced analytics modelling methods and tools to leverage useful internal and external data

Personal data is becoming a new economic 'asset class', a valuable resource for the 21st century.

World Economic Forum, 2012



Implement real-time trigger based analytics to provide early detection of opportunities and issues

identify hidden revenue opportunities within your customer base



Advanced analytics leverages specialised methods  
and tools to generate intelligent insights that  
drive business innovation

retain your high value customers,  
employees, brokers with the  
right retention offers

optimise capital across jurisdictions  
or business units through a deeper and  
more immediate knowledge of risks

leverage social media to deepen  
customer knowledge and open a new  
distribution channel



## Key questions insurers are asking

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**1** ..... What more can our own data tell us?

**2** ..... What else could we learn if we added external data to our models?

**3** ..... How can we build the power of analytics into day-to-day decision-making?

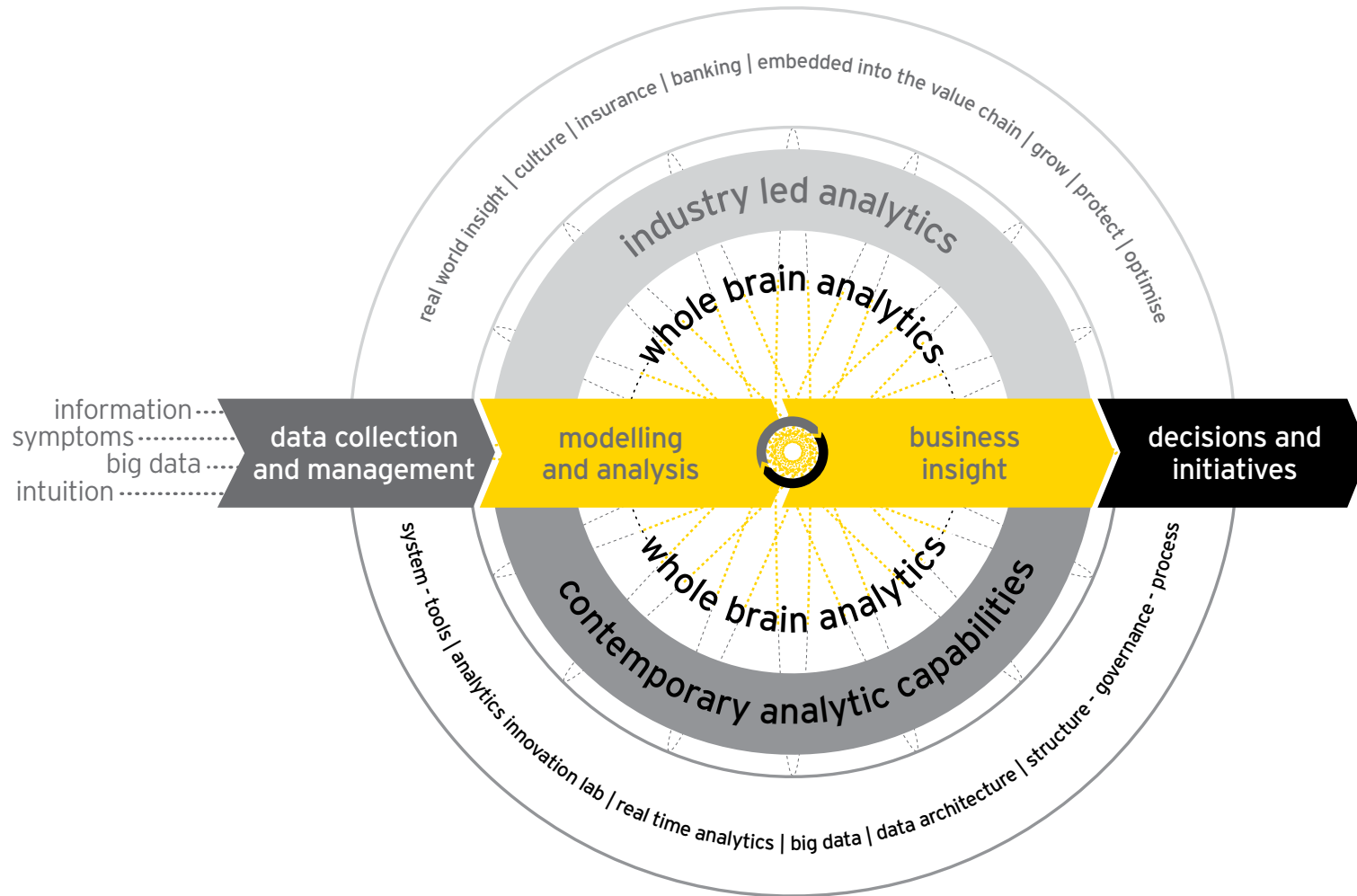
.....  
There is a formula for success

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## Three things are required to succeed

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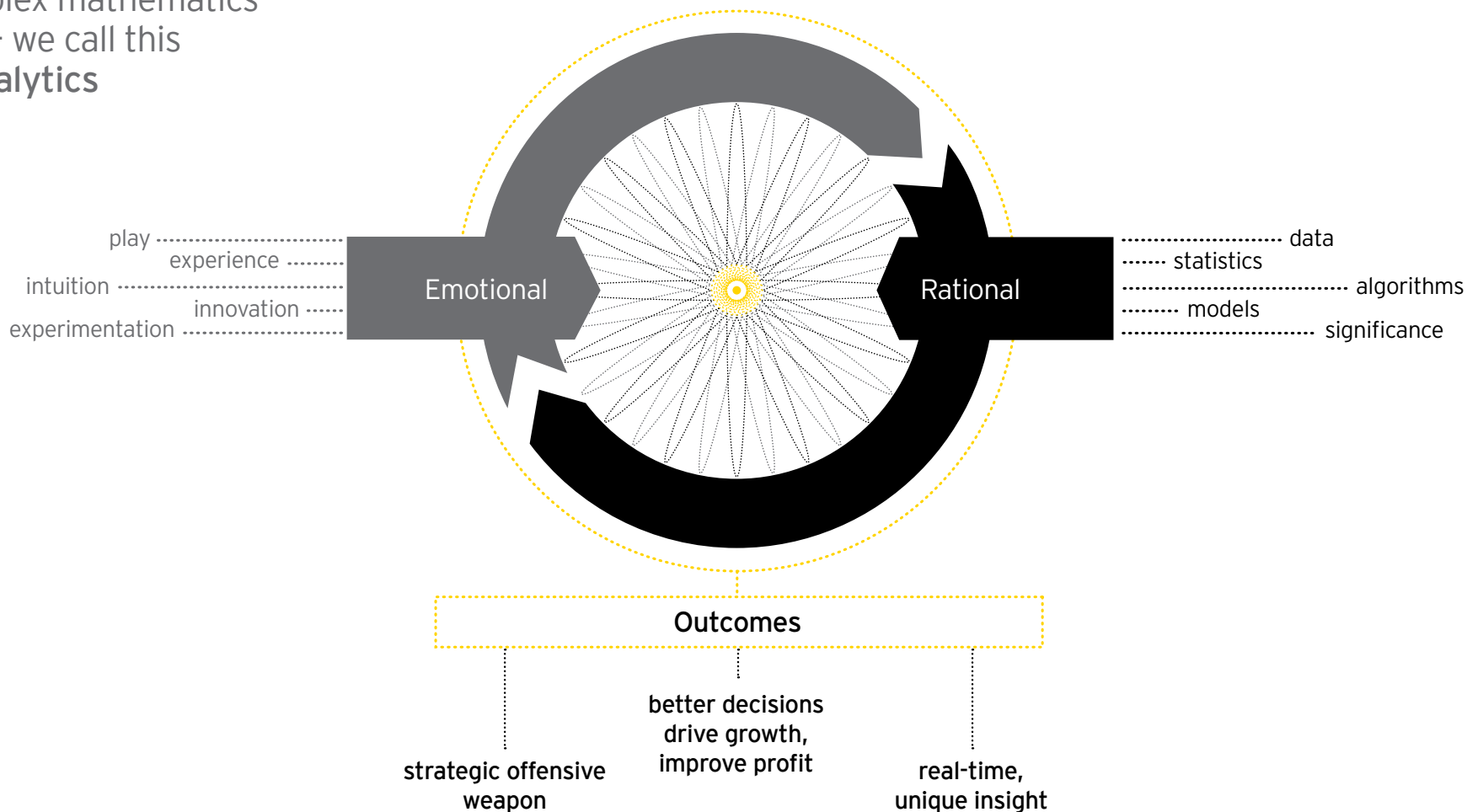
- 1** ..... **Whole brain analytics**  
an advanced analytics method
- 2** ..... **Industry led analytics**  
integrated into the business value chain
- 3** ..... **Contemporary analytic capabilities**  
the right skills, information architecture and tools




An effective combination of these capabilities accelerates innovation and delivery of business value

# Whole brain analytics

To generate business value, you need a method that combines complex mathematics and creativity – we call this **whole brain analytics**



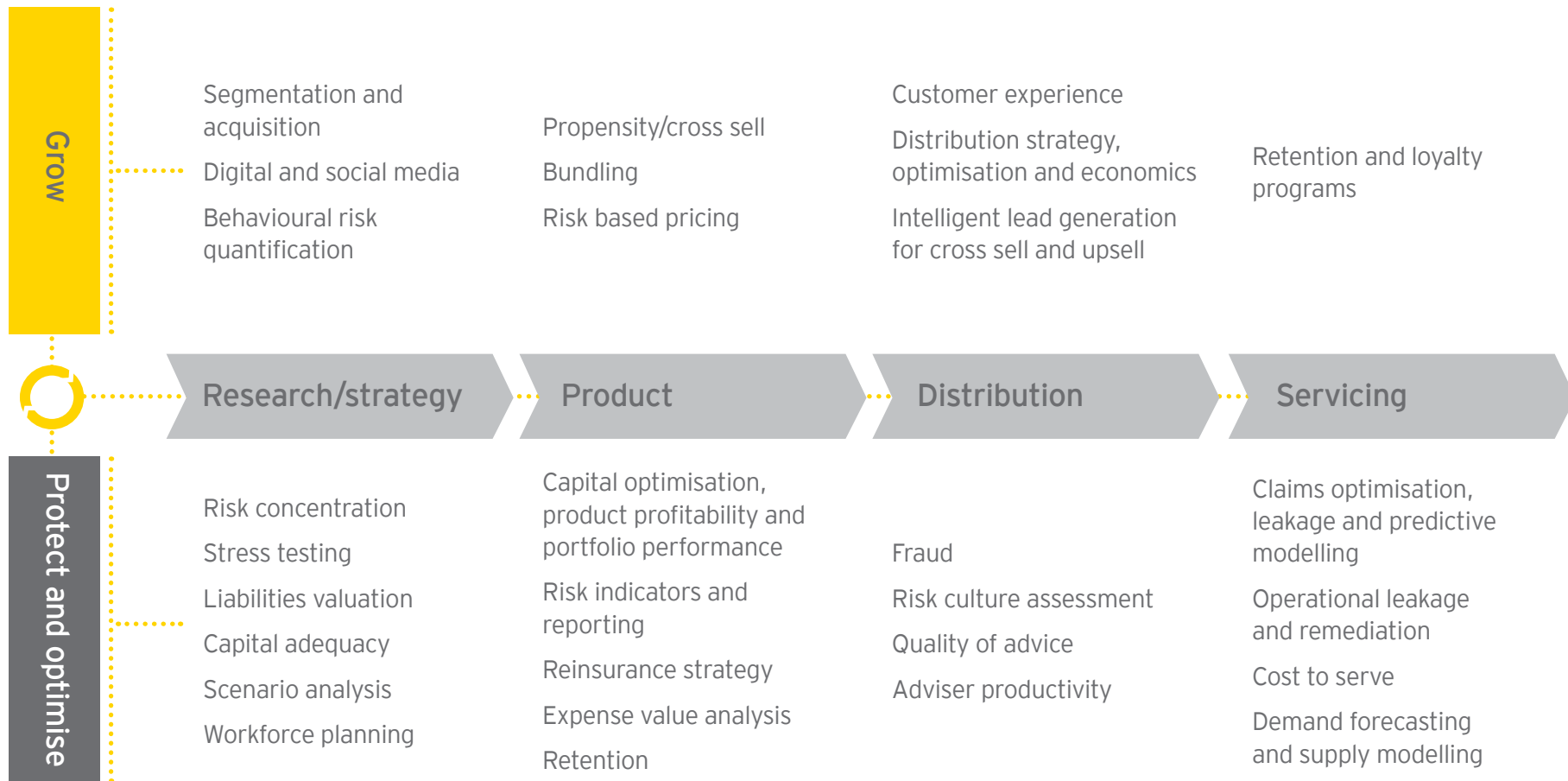


Bringing rational and emotional thinking together  
delivers new insight, allowing you to solve complex business  
issues and find new growth opportunities

The background of the slide is a bokeh effect consisting of numerous overlapping, semi-transparent circles in various colors including orange, yellow, red, blue, and purple. The circles vary in size and focus, creating a sense of depth and movement. A horizontal dotted line in a light yellow color runs across the middle of the slide, separating the title from the main text.

## Industry led analytics

Advanced analytics deliver more value when integrated with your business environment



This approach informs decision-making with practical, deep insight in real-time across the insurance value chain

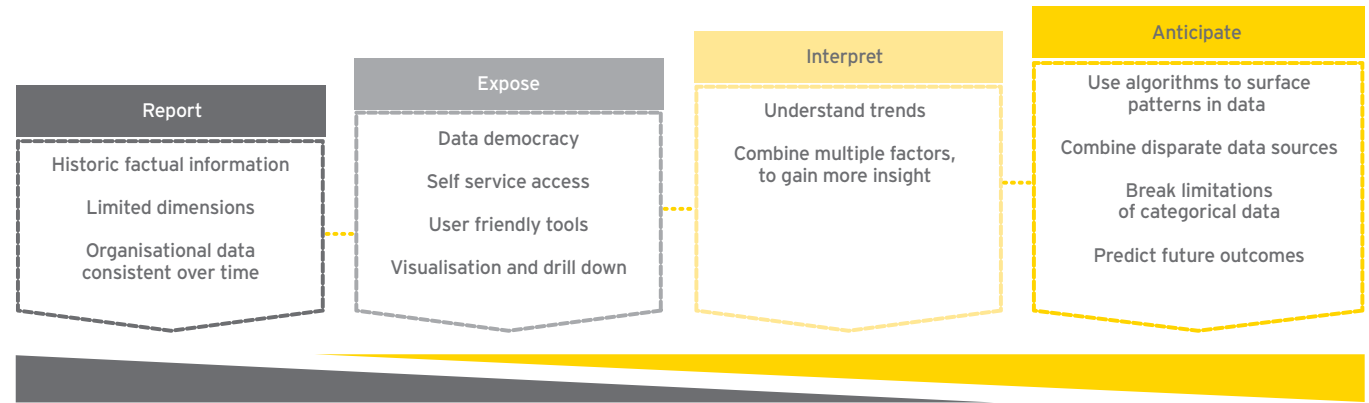


## Contemporary analytics capability

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Establish the right organisation models,  
skills, information architecture tools  
and methods





	Report	Expose	Interpret	Anticipate
<b>Organisation model</b>	Centralised controlled Access/distribution Regulatory level governance		Embed operational analytics Agility to adapt to needs	Analytics innovation lab Analytics driven culture Agile model to support unique needs
<b>Skills</b>	Database management Basic spreadsheeting Standard report production Data quality		Database programming Ad-hoc analysis Statistical inference Data governance	Machine learning Advanced programming Strong business acumen
<b>Analytical tools and methods</b>	Excel SQL Cognos Business objects Cubes		Tableau Qlikview Real-time decisioning	SAS R IBM SPSS Whole brain analytics
<b>Information architecture</b>	Internal structured data Centralised warehouse Relational databases		Enriched data Operational system row data extracts Sandpit environment	Unstructured and external data Social media – mobile devices – geospatial Hadoop, in memory database, big data storage

## Seven actions for success

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- 1** ..... **Make a commitment**  
Commit to an inquisitive, information driven, culture
- 2** ..... **Assess maturity**  
Assess analytics maturity against your current and future needs
- 3** ..... **Define your approach**  
Establish a clear operating and governance model
- 4** ..... **Map your opportunities**  
Develop an analytics opportunity map that identifies and prioritises analytics led initiatives based on business value
- 5** ..... **Prove the concept**  
Start with a targeted scope and deliver value early
- 6** ..... **Analytics innovation lab**  
Establish an analytics innovation lab as a way to do rapid experimentation and drive business innovation
- 7** ..... **Build for the future**  
Build a scale-able road map to meet future needs of the business



## examples

### Situation

The life insurance division of a leading Australian bank had high lapse rates eating into its profit margins.

### Solution

We used analytics to diagnose actual patterns, developed short term tactical remediation initiatives and designed high level retention strategies.

### business outcomes

More than 7% increase in NPAT over the first 6 months.

Potential of a further 2% reduction in lapse rates over the long term.

### Situation

A global insurance and re-insurance client had increasing claims costs, year on year.


### Solution

We undertook an extensive analytical review of the clients' private motor vehicle portfolio, leading to a current state assessment of overall claims costs against industry benchmarks and an improved data management framework.

### business outcomes

Savings of claims costs in the millions of dollars.

Improved overall operating efficiency.

The background of the slide is a dark, textured image. It features a world map where the continents are outlined in a glowing yellow, dotted line. Overlaid on this map are several thick, wavy, glowing yellow lines that resemble data paths or neural connections. The entire scene is set against a background that looks like a golden circuit board or a complex network of lines. A horizontal dotted yellow line runs across the top of the image, just above the text.

In a volatile world, advanced analytics for insurance allows you to identify new growth opportunities, while protecting and optimising your enterprise.

The background of the slide is a complex, abstract pattern of intersecting lines in shades of green and orange. A horizontal dotted line in a light yellow-green color runs across the upper portion of the image, passing behind the text.

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SCORE No. AUNZ00000335

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